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(Not for submission under 37 CFR 1.99)

Application Number	10588694
Filing Date	2005-02-09
First Named Inventor	AGNES, George R.
Art Unit	
Examiner Name	/Christopher Adam Hixson/
Attorney Docket Number	S168 0226/TWB

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	1	Gao, J., et al., "Solidification of levitated Nd-Fe-B alloy droplets at significant bulk undercoolings", Journal of Alloys and Compounds, 2003, 350:344-350.	☐
	2	Gaumet, J. J. and Strouse, G., "Nanospray mass spectrometry technique for analysing nanomaterials from molecular precursors up to 1.5 nm in diameter cluster", Materials Science and Engineering, 2002, C 19:299-304.	☐
	3	Green, B. N., et al., "Observation of large, non-covalent globin subassemblies in the .apprx.3600 kDa hexagonal bilayer hemoglobins by electrospray ionization time-of-flight mass spectrometry", J. Mol. Biol., 2001, 309:553-560.	☐
	4	Grimm, R. L. and Beauchamp, J. L., "Evaporation and discharge dynamics of highly charged droplets of heptane, octane, and p-Xylene generated by electrospray ionization", Anal. Chem. 2002, 74:6291-6297.	☐
	5	Haddrell, A. E. and Agnes, G. R., "Organic cation distributions in the residues of levitated droplets with net charge: validity of the partition theory for droplets produced by an electrospray", Anal. Chem., 2004, 76:53-61.	☐
	6	Hanczyc, M. M., et al., "Experimental models of primitive cellular compartments: encapsulation, growth, and division", Science, 2003, 302:618-622.	☐
	7	Hanton, S. D., et al., "Investigations of electrospray sample deposition for polymer MALDI mass spectrometry", J. Am. Soc. Mass Spectrom., 2004, 15:168-179.	☐
	8	Hao, C., et al., "Electrospray ionization tandem mass spectrometric study of salt cluster ions: part 1- investigations of alkali metal chloride and sodium salt cluster ions", J. Mass Spectrom., 2001, 36:79-96.	☐
	9	Hao, C., et al., "Electrospray ionization tandem mass spectrometric study of salt cluster ions: part 2- salts of polyatomic acid groups and of multivalent metals", J. Mass Spectrom., 2001, 36:509-521.	☐
	10	Hermann, R., et al., "Growth kinetics in levitated and quenched Nd-Fe-B alloys", IEEE Trans. Magn., 2001, 37 (3):1100-1105.	☐
	11	Hernandez, H., et al., "Observation of the iron-sulfur cluster in Escherichia coli biotin synthase by nanoflow electrospray mass spectrometry", Anal. Chem., 2001, 73:4154-4161.	☐

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	12	Huber, C. and Wachtershauser, G., "Activated acetic acid by carbon fixation on (Fe,Ni)S under primordial conditions", Science, 1997, 276:245-247.	☐
	13	Huber, C. and Wachtershauser, G., "Peptides by activation of amino acids with CO on (Ni,Fe)S surfaces: Implications for the origin of life", Science, 1998, 281:670-672.	☐
	14	Iavarone, A.T., et al., "Buffer loading for counteracting metal salt-induced signal suppression in electrospray ionization", Anal. Chem., 2004, 76(14):3944-3950.	☐
	15	Ishikawa, Y. and Komada, S., "Development of acoustic and electrostatic levitators for containerless protein crystallization", Fujitsu Sci. Tech. J. 1993, 29:330-338.	☐
	16	Jacob, K.T., et al., "Electromagnetic levitation study of sulfur in liquid iron, nickel, and iron-nickel alloys", Trans. Indian Inst. Met. 1986, 39:62-69.	☐
	17	Jacob, P., et al., "Phase transfer and freezing processes investigated on acoustically levitated aqueous droplets", Fresenius J. Anal. Chem., 2001, 371:726-733.	☐
	18	Jang, H. M. and Hwang, N. M., "Theory of the charged cluster formation in the low pressure synthesis of diamond: part 1. charge-induced nucleation", J. Mater. Res., 1998, 13(12):3527-3535.	☐
	19	Jang, H. M. and Hwang, N. M., "Theory of the charged cluster formation in the low pressure synthesis of diamond: part II. free energy function and thermodynamic stability", J. Mater. Res., 1998, 13(12):3536-3549.	☐
	20	Joshi, Prakash, et al., "Homochiral selection in the montmorrillonite-catalyzed and uncatalyzed prebiotic synthesis of RNA", Chem Commun., 2000, 24:2497-2498.	☐
	21	Julian, R.R., et al., "Nanocrystalline aggregation of serine detected by electrospray ionization mass spectrometry: origin of the stable homochiral gas-phase serine octamer", J. Phys. Chem. B., 2002, 106:1219-1228.	☐
	22	Kebarle, P. and Tang, L., "From ions in solution to ions in the gas phase. The mechanism of electrospray mass spectrometry", Anal. Chem.,1993, 65(22):972A-986A.	☐

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	23	Keesee, R.G. and Castleman, A. W., "Thermochemical data on gas-phase ion-molecule association and clustering reactions". J. Phys. Chem. Ref. Data, 1986, 15:1011-1071.	☐
	24	Klotz, S. A., "The contribution of electrostatic forces to the process of adherence of Candida albicans yeast cells to substrates", FEMS Microbiol. Lett., 1994, 120:257-262.	☐
	25	Koch, K. J., et al., "Clustering of nucleobases with alkali metals studied by electrospray ionization tandem mass spectrometry: implications for mechanisms of multistrand DNA stabilization", J. Mass Spectrom., 2002, 37:676-686.	☐
	26	Kojima, T., et al., "Observation of triply charged metal ion clusters by electrospray and laser spray", Rapid Commun. Mass Spectrom., 1999, 13:2090-2097.	☐
	27	Kramer, B., et al., "Homogeneous nucleation rates of supercooled water measured in single levitated microdroplets", J. Chem. Phys., 1999, 111(14):6521-6527.	☐
	28	Krieger, U. K., et al., "Supercooling of single H2SO4/H2O aerosols to 158 K: No evidence for the occurrence of the octrahydrate", Geophys. Res. Lett., 2000, 27(14):2097-2100.	☐
	29	Lee, S.-W. and Beauchamp, J. L., "Fourier transform ion cyclotron resonance study of multiply charged aggregates of small singly charged peptides formed by electrospray ionization", J. Am. Soc. Mass Spectrom., 1999, 10:347-351.	☐
	30	Lee, S.-W., et al., "Chemistry in nanodroplets: studies of protonation sites of substituted anilines in water clusters using FT-ICR", J. Am. Chem. Soc., 2000, 122:9201-9205.	☐
	31	Lee, Y., et al., "Metal-assisted esterification: glutaric acid-iron(II) complexes in the gas phase", Rapid Commun. Mass Spectrom., 2001, 15:484-488.	☐
	32	Luxembourg, S. L., et al., "Effect of local matrix crystal variations in matrix-assisted ionization techniques for mass spectrometry", Anal. Chem., 2003, 75:2333-2341.	☐
	33	McDonnell, L. A., et al., "Using matrix peaks to map topography: Increased mass resolution and enhanced sensitivity in chemical imaging", Anal. Chem., 2003, 75:4373-4381.	☐

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	34	Manil, B., et al., "Charge emission and decay dynamics of highly charged clusters and micro-droplets", Nucl. Instrum. Methods Phys. Res. B, 2003, 205:684-689.	☐
	35	March, R.E., "Ion trap mass spectrometry", Int. J. Mass Spectrom. Ion Processes, 1992, 118/119:71-135.	☐
	36	Millikan, R. A., "A new modification of the cloud method of measuring the elementary electrical charge, and the most probable value of that charge", Phys. Rev., 1909, 30:560-561.	☐
	37	Millikan, R. A., "On the elementary electrical charge and the avogadro constant", Phys. Rev., 1911, 2:109-143.	☐
	38	Morozov, V. N., et al., "Atomic force microscopy of structures produced by electrospraying polymer solutions", Int. J. Mass Spectrom.,1998, 178:143-159.	☐
	39	Musick, J., et al., "Investigations of radical polymerization and copolymerization reactions in optically levitated microdroplets by simultaneous Raman spectroscopy, Mie scattering, and radiation pressure measurements", Appl. Spectrosc., 1998, 52(5):692-701.	☐
	40	Musick, J. and Popp, J., "Investigations of chemical reactions between single levitated magnesium chloride microdroplets with SO2 and NOx by means of Raman spectroscopy and elastic light scattering", Phys. Chem. Chem. Phys. 1999, 1:5497-5502.	☐
	41	Musick, J., et al., "Chemical reactions of single levitated inorganic salt particles with ammonia gas", Appl. Spectrosc., 2000, 54(8):1136-1141.	☐
	42	Myland, J.C. and Oldham, K. B., "Overcoming electroneutrality: concentrative and electrical conditions inside a charged droplet of electrolyte solution", J. Electroanal. Chem., 2002, 522:115-123.	☐
	43	Nagashio, K., et al., "Direct crystallization of Y3Fe5O12 garnet by containerless solidification processing", Materials Transactions, 2001, 42:233-237.	☐
	44	Nagashio, K., et al., "Containerless solidification and net shaping by splat quenching of undercooled Nd2Fe14B melts", Materials Transactions, 2003, 44:853-860.	☐

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	45	Nettleton, E. J., et al., "Characterization of the oligomeric states of insulin in self-assembly and amyloid fibril formation by mass spectrometry", Biophys. J., 2000, 79:1053-1065.	☐
	46	Paul, W., "Electromagnetic traps for charged and neutral particles", Reviews of Modern Physics, 1990, 62(3):531-540.	☐
	47	Rabeony, H. and Mirabel, P., "Experimental study of vapor nucleation on ions", J. Phys. Chem., 1987, 91:1815-1818.	☐
	48	Ray, A. K., et al., "Dynamic behaviour of single glycerol droplets in humid air streams", Langmuir, 1989, 5:133-140.	☐

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